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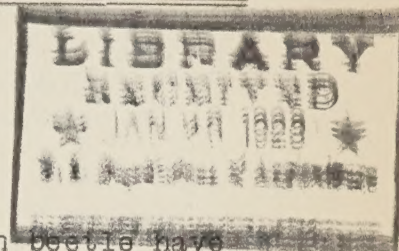
MONTHLY LETTER OF THE BUREAU OF ENTOMOLOGY
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TRUCK CROP INSECT INVESTIGATIONS

F. H. Chittenden, Entomologist in Charge



Efforts toward the control of the Mexican bean beetle have been rewarded by the discovery of a very promising parasite. E. Graywood Smyth, who was sent by the Bureau in early May to Mexico to search for natural enemies of the bean beetle, has discovered a tachinid parasite that preys upon at least two species of *Epilachna* and seems to restrict itself to that genus. It was responsible for a very high fatality among *Epilachna* larvae in the Valley of Mexico and at Cuernavaca. In the neighborhood of 2,000 living puparia of this fly were sent to the Birmingham, Ala., laboratory and from this material Neale F. Howard, in charge of the laboratory, has succeeded in rearing one generation from native *Epilachna* larvae. A considerable number of puparia are now being held in hibernation for the coming spring.

In addition, Mr. Smyth found in Mexico two varieties of beans which show promise of resistance to the injurious attack of the bean beetle, one of them, a native edible white bean, known as "ayocote," which is cultivated on a fairly large scale in sections, the other a wild brown bean of the genus *Phaseolus*. The latter grows very abundantly along streams in southern Mexico, climbing bushes and other vegetation, and the rather leathery foliage which it produces is very seldom attacked by the bean beetle, so that there is a possibility of the bean proving of great value for hybridizing with cultivated varieties to breed a resistant stock.

C. H. Popenoe, E. Graywood Smyth, J. E. Graf, and D. E. Fink attended the meetings of the Association of Economic Entomologists at Boston during the holidays.

SOUTHERN FIELD CROP INSECT INVESTIGATIONS

J. L. Webb, Entomologist Acting in Charge

Dr. W. D. Hunter spent several days in Washington during the month in connection with work of the Bureau and the Federal Horticultural Board.

B. R. Coad was in Washington several times during the month accompanied by A. J. Chapman, of the Boll Weevil Laboratory, for the purpose of investigating the calcium arsenate supply. They also visited New York City and Cleveland, Ohio, in the course of their investigations.

Other visitors at the Washington office were S. E. Crumb, of the tobacco insect investigations, and R. C. Gaines, of the Boll Weevil Laboratory, who came to consult the library and to work up their field notes.

T. E. Holloway spent about ten days in November at Cairo, Ga., determining the extent of a new infestation of the sugar-cane mealybug. J. W. Ingram has now been detailed to make a farm-to-farm survey of the infested district. No sugar is produced there, but much cane is grown for sirup.

W. E. Haley, assisted by J. W. Ingram and L. P. O'Dowd, has finished an inspection of the Louisiana sugar parishes for the Cuban tachinid parasite of the sugar-cane moth borer. The parasites were released at 41 plantations during 1919 and 1920. They were found this fall at 14 plantations, and probably occur at others. Since their release the parasites have been recovered at a total of 25 plantations.

T. E. Holloway and T. C. Barber recently visited the Bureau laboratories at San Antonio and Uvalde, Tex., and afterwards made an inspection trip along the Texas coast.

W. E. Haley has been working with E. K. Bynum, of the Mississippi Plant Board, in inspecting for the new pink borer of sugar cane in the vicinity of Gulfport, Miss.

At the request of Prof. R. W. Harned, of the Mississippi Plant Board, T. E. Holloway has prepared a short paper on the sugar-cane moth borer for publication in the Mississippi Quarterly Bulletin. The paper was read at a meeting of the employees of the Plant Board recently, and the subject of sugar-cane insects in Mississippi was discussed.

LIBRARY

Mabel Colcord, Librarian

New Books

- Austen, E. E., and Emil Hegh. Tsetse-flies, their characteristics, distribution, and bionomics with some account of possible methods for their control...London, Imperial Bureau of Entomology, 1922. 188 p., illus., pls. Bibliography of the principal publications consulted, p. 165-178.
- Bonnier, G. E. M. Histoire naturelle de la France, 26^e partie. Technologie Zoologie appliquée. Paris (7^e), Les fils d'Emile Deyrolle, 1922. 256 p., illus. Insectes, p. 167-205.
- Bradley, J. C. The taxonomy of the masarid wasps including a monograph on the North American species. Berkeley, University of California Press, 1922. (Univ. of California Tech. Bul. College of Agr., Agr. Expt. Sta., Entomology, v. 1, no. 9, p. 369-434, Nov. 21, 1922.)
- Casey, T. L. Studies in the rhynchophorous subfamily Barinae of the Brazilian fauna. Lancaster, Pa., New Era Printing Company, 1922. 520 p. (His Memoirs on the Coleoptera No. 10.)
- Chandler, A. C. Animal parasites and human diseases. Ed. 2, rev. New York, J. Wiley & Sons, Inc., London, Chapman & Hall, Ltd., 1922. 572 p., illus. Sources of information, p. 529-534.
- Curtis, W. C. Science and human affairs from the viewpoint of biology. N. Y., Harcourt, Brace and Company, 1922. 330 p., illus.
- Derennes, Charles. Vie de grillon. Paris, Albin Michel, editeur, 1920. 255 p.
- Fabre, J. H. Social life in the insect world. Translated by Bernard Miall. London, T. Fisher Unwin, Ltd., 1911. 14th impression, 1922. 327 p., pl.
- Ferris, G. F. Contributions toward a monograph of the sucking lice, part 3. illus. (Stanford University, California, Publications. University Series. Biological Sciences, v. 2, no. 3, 1922.)

- Feytaud, Jean. Le doryphore. Chrysonèle nuisible à la pomme de terre (Leptinotarsa decemlineata Say). Bordeaux, Aug., 1922. 48 p., illus., col. pl. (Revue de Zoologie Agricole, Ann. 21, Numero special, Août, 1922.)
- Glenn, P. A. Codling-moth investigations of the State entomologist's office, 1915, 1916, 1917. Urbana, Ill., August, 1922. p. 219-289. (Illinois Dept. Regis. & Educ., Div. Nat. Hist. Survey, v. 14, art. 7.)
- Great Britain- Forestry commission. The Douglas fir Chermes (Chermes cooleyi). London, Published by His Majesty's Stationery Office, 1922. 50 p., 9 pl. (Its Bulletin 4) By R.N. Chrystal and Fraser Story.
- Great Britain, Ministry of Health. Model by-laws...VI. Slaughterhouses. London, Published by His Majesty's Stationery Office, 1922. 23 p.
- Houard, C. Les collections cecidologiques du Laboratoire d'entomologie du Museum d'histoire naturelle de Paris: l'herbier de galles de C. Houard. Marcellia, v. 18 (for 1919) Avellino, Tipo-litografia Pergola, 1921. 189 p.
- Houlbert, C. V. Les coléoptères d'Europe. Paris, G. Doin, 1921-1922. 2 v. (Encyclopédie scientifique... Bibliothèque de zoologie.)
- Karny, Heinrich. Der insektenkorper und seine terminologie. Wien, A. Pichlers Witwe & Sohn, 1921. 92 p., illus. Literatur, p. 1.
- McCracken, Isabel, and Dorothy Egbert. California gall-making Cynipidae with descriptions of new species. 70 p., 2 pl. (Stanford University, California, Publications. University Series. Biological Sciences, v. 3, no. 1.)
- Nusslin, Otto, Forstinsektenkunde ... 3 aufl. neubearbeitete....L. Rhumbler...Berlin, Verlagsbuchhandlung Paul Parey, 1922. 568 p., illus.
- Parker, Theodore. The suppression of insect pests and fungoid diseases. I. The fumigation of malhouses. (Bulletin Bureau of Bio-technology, Leeds, No. 7, Oct., 1922, p. 229-234.)
- Roubaud, E. Etudes sur le sommeil d'hiver pre-imaginal des muscides. Les cycles d'asthenie et l'athermobiase reactivante specifique. (Bulletin Biol. de la France et de la Belgique, Paris, v. 56, pt. 4, p. 455-544, 1922.)

Schenkling, Sigmund. Nomenclator coleopterologicus, eine etymologische erklärung sämtlicher gattungs-und artnamen der kafer der deutschen fauna sowie der angrenzenden gebiete. 2 aufl. in verbindung mit Prof. Dr. R. Schmidt...Jena, G. Fischer, 1922. 255 p.

Watt, M. N. The leaf-mining insects of New Zealand. Trans. and Proc. New Zealand Institute, v. 52 (new issue), p. 439-466, illus., pl. XXX, August 9, 1920.

Wheeler, W. M. Ants of the American Museum Congo expedition. A contribution to the myrmecology of Africa... with the collaboration of J. Bequaert, I. W. Bailey, F. Santschi, and W. M. Mann. N. Y., Published by order of the trustees, 1921-1922. 1139 p., illus., 44 pls. (Amer. Mus. Nat. Hist. Bul., v.45.)

